



NIGERIA

**Report on the Medical Services  
for the Year 1945**

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as Sessional Paper No. 22 of 1946*

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# Report on the Medical Services for the Year 1945

## I. — ADMINISTRATION

### A. — STAFF

Staff shortage has continued and, despite the return of several Medical Officers from the Army, prospects at the end of the year were still dismal in respect of this cadre, so much so that unless there is an early improvement in the recruitment of Clinical Staff it will be impossible to implement the re-organisation of the department envisaged under the new Constitution for some considerable time to come. The proposed decentralization involves the creation of three new posts for Regional Deputy Directors who will be stationed as advisers to Chief Commissioners at Kaduna, Enugu and Ibadan. Each regional headquarters will also have an Assistant Director and Senior Medical Officer, while the staff at departmental headquarters will consist of the Director of Medical Services, the Deputy Director of Medical Services and two Assistant Directors of Medical Services, the post of Deputy Director and Assistant Director of Health Services having been abolished as from 1st April, 1945.

2. While the cessation of hostilities has led to a reduction in the period spent in travel to and from leave, shortage of shipping has continued to be acute and, in consequence, lengthy tours of service are still the rule.

### B.—LEGISLATION

#### LIST OF ORDINANCES, REGULATIONS, ETC., AFFECTING PUBLIC HEALTH

ENACTED DURING THE YEAR 1945

##### (1) ORDINANCES

Serial No.	Date	Short Title	Provisions	Gazette No.
11	1.4.45	The Births, Deaths and Burials (Amendment) Ordinance, 1945.	Amendment of section 48 (a) of Chapter 47 of the Laws of Nigeria.	24 of 1945
16	19.4.45	The Vaccination (Amendment) Ordinance, 1945.	Amendments of Vaccination Ordinance	24 of 1945
21	—	The Destruction of Mosquitoes Ordinance, 1945.	Measures for the destructions of Mosquitoes.	24 of 1945
32	19.4.45	The Yellow Fever and Infectious Diseases (Immunisation) Ordinance, 1945.	Provision for inoculation against Yellow Fever.	24 of 1945
34	26.4.45	The Public Health (Amendment) Ordinance, 1945.	Amendments of sections paragraph (6B) of 45 and 19, etc.	25 of 1945
52	—	The Private Hospitals Ordinance, 1945.	Provides for the registration, etc. of Private Hospitals.	68 of 1945
56	1.3.45	The Pharmacy Ordinance, 1945.	New Pharmacy Ordinance . . .	72 of 1945
60	—	The Pharmacy (Amendment) Ordinance, 1945.	Amendment of sections 2, 33, 56, 48, etc. of Ordinance No. 56 of 1945.	76 of 1945
69	22.12.45	The Destruction of Mosquitoes (Amendment) Ordinance, 1945.	Amendment of Ordinance No. 31 of 1945.	76 of 1945

LIST OF ORDINANCES, REGULATIONS, ETC., AFFECTING PUBLIC HEALTH  
ENACTED DURING THE YEAR 1945—*continued*

(2) REGULATIONS

<i>Serial No.</i>	<i>Date</i>	<i>Short Title</i>	<i>Provisions</i>	<i>Gazette No.</i>
20	6.7.45	The Hospital Fees (British Overseas Airways Corporation—Amendment) Regulations, 1945.	Amendment of Regulations No. 24 of 1945 by adding sub-regulation (13) to regulation 2.	46 of 1945

(3) ORDERS-IN-COUNCIL

<i>Serial No.</i>	<i>Date</i>	<i>Short Title</i>	<i>Provisions</i>	<i>Gazette No.</i>
3	2.2.45	The Native Courts (Jurisdiction in Public Health Offence) Order-in-Council, 1945.	Grant of jurisdiction to Native Courts to enforce Public Health Rules.	9 of 1945
9	29.6.45	The Public Health (Application to Victoria—Amendment) Order-in-Council, 1945.	Amendment of Order-in-Council No. 21 of 1926.	46 of 1945
10	29.6.45	The Births, Deaths and Burials (Enugu Cemeteries—Amendment) Order-in-Council, 1945.	Amendment of Order-in-Council No. 25 of 1940.	46 of 1945
12	5.10.45	The Births, Deaths and Burials (United States Military Cemetery—Ikoyi) Order-in-Council, 1945.	Provision for United States Military Cemetery at Ikoyi, Lagos.	65 of 1945
13	1.11.45	The Births and Deaths (Jos Town and Bukuru) Registration, Order-in-Council, 1945.	Registration of Births and Deaths in Jos Town and Bukuru.	69 of 1945
15	19.12.45	The Births, Deaths and Burials (Warri European Cemetery Extension) Order-in-Council, 1945.	Extension of the European Cemetery at Warri.	77 of 1945

(4) RULES

<i>Serial No.</i>	<i>Date</i>	<i>Short Title</i>	<i>Provisions</i>	<i>Gazette No.</i>
2	9.2.45	The Townships (Eastern Provinces) Building (Amendment) Rules, 1945.	Amendment of Rules No. 4 of 1943 ..	10 of 1945

### C.—FINANCE

3. Below are statements for the financial year 1944-45:—

#### A.—MEDICAL, HEALTH AND LABORATORY SERVICES

	£	s	d
Total Revenue, 1943-44 ... ... ... ...	99,695	19	5
Total Revenue, 1944-45 ... ... ... ...	105,182	0	0
Total Expenditure, 1943-44 ... ... ... ...	605,451	15	0
Total Expenditure, 1944-45 ... ... ... ...	638,698	0	0
Increase ... ... ... ...	30,247	0	0

#### B.—SLEEPING SICKNESS SERVICE

	£	s	d
Total Expenditure, 1943-44 ... ... ... ...	36,679	0	8
Total Expenditure, 1944-45 ... ... ... ...	37,938	0	0
Increase ... ... ... ...	1,259	0	0

#### D.—MEDICAL STORES

4. The supply position has improved somewhat during the year and the work of the Central Stores has increased. The staff position is acute, and delays in the regular despatch of medical supplies throughout the country are only to be expected, unless the position improves.

5. During the year, the value of stores handled again exceeded £200,000. 10,256 Store Issue Vouchers were prepared; 10,053 cases of supplies were packed and despatched up-country; 5,252 parcels were also despatched, all of which involved a great amount of clerical work.

### II.—PUBLIC HEALTH—GENERAL REMARKS

#### *European Health*

6. The malaria rate again showed a slight drop among Europeans, being 25.8 per cent of all in-patients. Comparative figures over the last four years are:—

1941	1942	1943	1944
44%	35.4%	30%	27.5%

7. The general health of Europeans was, on the whole, good. Malaria was the commonest condition necessitating admission. Apart from malaria, diseases of the skin, enteritis and diseases of the digestive system were most frequently encountered.

#### *African Health*

8. Figures for the last three years were:—

	1943	1944	1945
In-patients ... ... ...	99,227	97,048	106,083
Out-patients ... ... ...	773,980	947,341	866,449

9. Diseases of the Skin, Cellular Tissues, Bones and Organs of Locomotion were responsible for the most numerous admissions comprising 12.5 per cent of the total.

10. Diseases of pregnancy, child-birth and the puerperal state accounted for 12.1 per cent.

11. Respiratory diseases (excluding tuberculosis) accounted for 8 per cent.

12. There is little change to report in the incidence of infectious, intestinal diseases, and helminthic infections.

13. The number of hospital cases of cerebro-spinal fever was less than in 1944, 1,500 cases being recorded as compared with 2,060.

14. Smallpox, too, showed a decrease in admissions.

15. The figures for pulmonary **tuberculosis** remain almost the same as they were in 1944. Pulmonary tuberculosis is still the commonest cause of invaliding amongst African officials, and during the year was responsible for 18.9 per cent of all invalidings.

#### *Venereal Disease*

16. The annual returns show that there has been an increase in the number of cases of syphilis treated and a slight fall in the cases of gonorrhoea.

17. In the South, all reports show a falling off in the number of cases of gonorrhoea treated and it is thought this may be due in the main to the increasing activity of private practitioners and self medication with sulphonamide.

18. Comparative figures for the Cameroons and Port Harcourt for 1944 and 1945 show:—

			1944	1945
Cameroons	...	...	4,433	2,488
Port Harcourt	...	...	4,026	945

19. In the North, venereal disease remains as serious a problem as before.

20. It is hoped that with the introduction during the year of legislation to control and check the sale of sulphonamides and other dangerous drugs, more patients will be persuaded to attend for hospital treatment and that the production of a sulphanilamide-resistant gonococcus may be impeded.

#### *Leprosy Service*

21. The new Leprosy Service came into being during the year and consists of a Central Leprosy Unit in charge of a Senior Leprosy Officer and three Area Organisations, each under an Area Superintendent. The three areas are Benin and Warri Provinces together, Onitsha Province and Owerri Province. The Central Unit is intended as a base for administration, training and investigation.

22. The Area Organisations consist of (a) a central settlement as a base, training school and segregation unit, (b) clinics--as local centres for diagnosis and treatment, (c) segregation villages where infectious cases may be isolated in their own neighbourhood.

23. In addition, there is a touring staff for tracing active leprosy in the general population, and there are welfare activities to meet the needs of the individual patient, which cannot be covered by the medical branch. The welfare work is under the control of the Co-operating Missions, which is in each area that Mission which was originally associated with the work. The Service came into operation only on April 1st and so far is still going through a transition period. It is hoped that by the end of 1946, definite progress will be reported.

#### *School of Medicine*

24. The number of students attending classes in 1945 was as follows:—

Seven students in their first year.

Five students in their second year.

Six students in their third year.

Six students in their fourth year.

Three students in their fifth year.

One student in his sixth year.

The last mentioned student obtained his Diploma and was the only graduate of the year. Further particulars may be found in Appendix B.

#### *Lunacy*

25. A small mental hospital is at present in operation at Abeokuta and in the very near future it is planned to build a large modern mental hospital there. All asylums, of which there is a great inadequacy, remain as crowded as ever.

#### *Native Authority Dispensaries*

26. Comparative figures for the Northern and Southern Provinces are given below:—

	<i>Northern Provinces</i>		<i>Southern Provinces</i>	
	<i>1944</i>	<i>1945</i>	<i>1944</i>	<i>1945</i>
Cases treated ...	509,559	580,604	851,103	1,007,490
Total Attendances ...	2,320,998	3,200,298	2,821,811	3,118,972

#### *Hospital Buildings*

27. The new African Hospital at Victoria was almost completed by the end of the year and it is hoped to have it in operation early in 1946.

28. Additional 30-bed wards, intended primarily for ex-servicemen, have been built at the Hospitals at Bida, Sokoto, Benin, Bauchi, Makurdi, Kano and Yola.

29. Apart from this, alterations and extensions have been carried out at existing Hospitals, principally at Minna, Kumba, Agbor, Jos and Makurdi, while construction at the new Igbobi Rehabilitation Centre near Lagos has proceeded satisfactorily. The Administration of this Centre was taken over from the Military Authorities towards the end of the year and there are already signs that its modification to an Orthopaedic Hospital and Rehabilitation Centre for civilian cases will be required at an early date.

### III. — VITAL STATISTICS

30. The births and deaths of non-natives are compulsorily registrable throughout Nigeria.

31. Compulsory registration of the local population under the Births and Deaths Ordinance is in force in the townships of Lagos, Jos, Calabar, Port Harcourt, Enugu and Aba; in the township and adjoining foreign native settlements of Kano, in a limited area in Minna, Abuja, Bida, Kontagora and Makurdi. In addition, rules have been made and adopted in various towns by many of the Native Administrations.

32. Comparative figures are given below for Lagos Township, where compulsory registration has been in force since 1889:—

		1944	1945
Estimated population	... ... ...	172,000	174,200
Births (live)	... ... ...	7,240	7,804
Crude birth-rate (per 1,000)	... ...	42	45
Corrected birth-rate (per 1,000)	... ...	37.3	40.05
Deaths	... ... ...	3,674	4,051
Crude death-rate (per 1,000)	... ...	21.3	23.3
Corrected death-rate (per 1,000)	... ...	29.3	31.9
Deaths within first year of life	... ...	837	996
Infant Mortality (per 1,000)	... ...	116	128
Still births	... ... ...	252	259
Rate of still-births (per 100 live births)		3.4	3.3
Deaths from disease of pregnancy and Child birth	... ... ...	76	76
Maternal Mortality (per 1,000 live births)	... ... ...	10.5	9.8

33. The above figures represent only births and deaths of the indigenous population. The Birth and Death rates are not accurate as the total population is only an estimate based on the 1931 Census.

### IV. — HYGIENE AND SANITATION

#### 1. — PREVENTIVE MEASURES

##### (i) *Mosquito and other Insect-borne Diseases*

###### (a) *Malaria*

34. The anti-malarial work in Lagos area continued throughout the year. Progress made was as follows:—

35. *Ikoyi Area.*—All drainage was completed at N.E. Ikoyi swamp and a tide gate was installed. Additional drainage was carried out in Bambose swamp. All outstanding excavation was completed on the Lagos Town Council N.E. Ikoyi Scheme and there is now an area of approximately 50 acres of pleasant surroundings in the form of two large tidal lakes. Since the work has been completed, no instance of mosquito breeding has been found. It is planned to form a bund between the Eleshin and Bambose bunds.

36. *Apapa Mainland*. — Permanent concrete tide gate was constructed to replace two defective temporary sluices. The wood gates at most sluices were replaced.

37. *Iddo Island*. — Swamps drained and concrete sluice gate constructed.

38. *South Cowrie Creek*. — Area was surveyed and drains were pegged and traced. Bund facade and canal were completed and one sluice gate constructed.

39. *Ijora Village*. — Preliminary survey was carried out and the greater part of bush clearing completed in readiness for drain digging.

(b) *Yellow Fever*

40. No case of yellow fever was reported during the year. Investigations carried out by personnel of the Rockefeller Yellow Fever Research Institute at Yaba indicate that the comparative freedom from yellow fever in the past few years is illusory. This was demonstrated by the mouse-protection test in young children and wild monkeys. In view of this, no relaxation in anti-aedes measures can be permitted.

(c) *Plague*

41. No cases were reported during the year. Nineteen ships were fumigated with cyanide by the Port Health Staff, Lagos. In the port area, 4,577 rodents were caught and a flea count was made on 629 rats, which gave a flea index of 4.3 and a cheopis index of 2.4. At Port Harcourt, 11,581 rats were destroyed and 2,980 were examined for plague with negative results. At Calabar, 17,159 rats were destroyed and 6,253 examined with negative results.

(d) *Trypanosomiasis*

42. See Special Report.

(ii) *Epidemic Diseases*

(a) *Smallpox*

43. 6,720 cases were reported with 1,117 deaths compared with 5,164 cases and 816 deaths in 1944, showing death rates 16.6 per cent and 15.8 per cent respectively. The routine use of sulphathiazole was practised in certain areas and it is reported that in such cases the length of the pustular stage was appreciably reduced. Mass vaccination campaigns were carried out in Kano, Sokoto, Katsina and Plateau Provinces, and a similar campaign has been organised in Zaria Province. During the year, 1,660,699 vaccinations were performed throughout the whole country. The Port Health Officer at Port Harcourt reports that on several occasions European members of crews were poorly protected against smallpox and he comments that there appears to be no system of vaccination, or of checking previous vaccination, at home ports prior to the signing-on of the men.

(b) *Cerebro-spinal Meningitis*

44. 9,628 cases were reported during the year with 1,443 deaths — a mortality rate of 14.99 per cent. The majority of cases came from the Northern Provinces, where the disease was widespread.

(c) *Enteric*

45. Seventy-two cases occurred with eight deaths. In Lagos, nineteen cases were notified, as compared with seven in 1944. Of these four died.

(d) *Dysentery*.

46. There were no unusual features compared with other years. The majority occurred in the Northern Provinces, where 2,854 cases with sixty-nine deaths were reported.

(e) *Typhus*

47. For the first time on record in Nigeria, an epidemic of louse-borne typhus occurred in Jos Native Town between June and September. 126 cases of known clinical typhus occurred with a mortality rate of 25 per cent. In almost all cases, the clinical picture was dominated by nervous symptoms and signs, most of them believed to be due to an encephalitis. Other clinical features which differed from the classical description of typhus were the absence of a rash and absence of diarrhoea and vomiting. Prompt measures and the use of D.D.T. brought the epidemic under control. These measures included mass delousing of the population by treating and re-treating bedding, clothing and spare clothing, and by systematic spraying and re-spraying of the bodies of the people.

48. During the last quarter of the year the disease appeared in Kano City. The first case was admitted to the African Hospital in October and a second one in December. Those affected were suffering from malnutrition and were living in over-crowded hovels where ventilation was practically non-existent. The disease has since assumed the form of a minor epidemic for the control of which prompt action is being taken.

49. Apart from these outbreaks, sixteen cases of murine typhus were reported by the Port Health Officer, Lagos.

(iii) *Other Infectious Diseases*

(a) *Tuberculosis*

50. This disease is suspected to be on the increase in many urban areas due partly to housing conditions and general overcrowding, but concrete proof of this is not available. Many patients suffering from tuberculosis do not attend at the Hospital until the disease is so far advanced that treatment is of little avail. In Yola, active pulmonary tuberculosis has been found in quite a few ex-servicemen returning from overseas. In Lagos, 319 cases of tuberculosis were notified and of these 263 died.

(b) *Pneumonia*

51. The incidence of this disease depends largely on the factors mentioned above in connection with tuberculosis viz. overcrowding and housing conditions generally. In addition, during the cold season, the African tends to herd together in his compound with his family to keep warm, thereby providing ideal conditions for the development and spread of the disease.

(c) *Undulant Fever*

52. No cases were reported.

(d) *Rabies*

53. One human case of rabies was confirmed by post-mortem examination. Forty-one cases of canine rabies and one case of rabies in a cat were demonstrated by histological examination.

(e) *Yaws*

54. This condition is common throughout Nigeria. Experiments with penicillin have shown that rapid and effective treatment can be given for yaws, and it is possible that when penicillin becomes more easily obtainable and less costly an effective agent will be at hand to render whole populations non-infective in an extremely short time. One case of yaws was reported in a European.

(iv) *Helminthic Infections*

55. The Laboratory Service reported on 33,345 specimens of stool, which indicated the following helminth infestations:—

445 or 1.3 per cent showed *Taenia* eggs.

9,655 or 28.9 per cent showed *Ascaris* eggs.

9,127 or 27.3 per cent showed *Ankylostome* eggs.

178 or 0.53 per cent showed *Schistosoma mansoni* eggs.

Of 28,181 specimens of urine examined, ova of *Schistosome haematobium* were demonstrated in 1,066 or 3.7 per cent.

## II. — GENERAL MEASURES

(a) *Sewage Disposal*

56. There is little to report in regard to the method of composting of refuse and nightsoil which continues to be introduced throughout the country. Composting towers have been installed during the year at Kumba and Buea. In Apapa, the nightsoil is removed by the Lagos Town Council and is still being dumped into the Lagoon after disintegration, giving rise to numerous complaints. It is to be noted that the Council hope soon to provide a better method of disposal.

(b) *Refuse Disposal*

57. Incinerators continue to dispose of refuse, except in the larger towns where composting stations have been installed. There is nothing to report in this connection.

(c) *Water Supply*

58. A water purification plant has been installed at Kafanchan. The Geological Survey Department is making considerable progress with its programme of sinking wells in the Northern Provinces, where there is a dominant need for adequate and safe water supplies. Bacteriological findings of the routine examination of samples of water from the larger towns continue to be consistently satisfactory.

### III. — SCHOOL HYGIENE

59. Medical Officers have carried out school inspection throughout the country. Among the commonest conditions met with are tinea, scabies and pediculosis. Schistosomiasis is prevalent among school children in certain areas. It is noticeable that skin diseases show a tendency to disappear in children who have been resident at school for one or two years.

60. Sanitary Superintendents and Sanitary Inspectors have given lectures and talks and have carried on propaganda in hygiene and sanitation.

61. In Lagos, routine medical examination of school children was carried out in seven secondary and five elementary schools and a total of 1,543 children were examined. A Lady Medical Officer was appointed during the year to be responsible for work in the girls' schools. It was observed, possibly through better living condition and less overcrowding, that children on the mainland in the Ebute Metta and Yaba areas of the Township are, on the whole, of better general physique than those in Lagos.

### IV. — LABOUR CONDITIONS

62. In the Cameroons Plantations, permanent camps of a very satisfactory nature were started at Likomba and Tiko. The labourers' lines consisted of single-roomed brick houses in blocks of four or six with tiled roofs. Higher grade employees were provided with larger houses of well-designed types. In the temporary camps, conditions have, on the whole, shown a marked improvement, which will increase as staff and materials permit.

63. At Enugu Colliery, investigations were carried out into the incidence of hook-worm disease among the workmen. The conclusion reached is that the majority of the men, who came from Owerri Province, are infected before they start work in the Colliery.

64. In the Ife-Ilesha Area sanitary conditions are more satisfactory, as there has been a decline in the number of strangers who came to live in the local villages following the discovery of gold there.

65. In the timber camps at Ondo and Okitipupa, the improved conditions have been maintained.

66. On the Cowan Estate in Warri Province a compost factory has been started and improvements in housing have been made. It is planned to instal a pipe-borne water supply in the near future for both factory and labour lines. In the Jamieson River Rubber Estate in Benin Province a compost factory has been constructed, and on both this Estate and the Cowan Estate a maternity block has been built with the services of a resident midwife available at each.

### V. — FOOD IN RELATION TO HEALTH AND DISEASE

67. The cost of living is probably still on the increase and this, added to the fact that harvests have been indifferent during the year, has caused a general scarcity of foodstuffs. Coco-yams and plantains were particularly in short supply in the Cameroons.

68. In the North, as a result of good rains, food was not so short and cereals were plentiful, but there is too little variation in the diet. In the rural areas of the North, the peasant does not appear to obtain enough protein food and, during the dry season, not enough green vegetables. In spite of this, deficiency diseases do not seem to be very common.

#### VI. — PORT HEALTH WORK AND ADMINISTRATION

69. No seaport or airport was declared infected during the year. The Apapa airport was closed down during the year and was taken over as Military Headquarters. The airport for Lagos is now at Ikeja. No cases of major infectious disease have occurred on ships.

#### VII. — TRAINING OF HEALTH PERSONNEL

70. At the Kano Sanitary Training School, in addition to Native Administration students who received a short course training, three Government students completed their course during the year. At the Ibadan Sanitary Training School thirty students completed the nine-months course and twenty-four are in training. As a result of careful selection, the standard of intelligence of present pupils is well above average and a high pass-rate is anticipated at the forthcoming examination. Thirteen candidates sat for, and nine passed the annual examination held by the Royal Sanitary Institute (British West Africa) for the Sanitary Inspector's Certificate.

#### VIII. — MATERNITY AND CHILD WELFARE

71. In the Northern Provinces, progress continues to be unsatisfactory, but it is hoped that when it is possible to send out women of Northern extraction, who have been trained in elementary domiciliary midwifery, to contact the people in the villages, prejudices will be gradually overcome and the northern women persuaded to attend ante-natal and child welfare clinics.

72. Maternity and Child Welfare work was carried out in most of the medical areas in the Southern Provinces. In addition to the facilities available at the hospitals, clinics are attached to many of the Native Administration dispensaries in the out-stations. These are staffed by Midwives holding the Grade II Certificate under supervision of the Medical Officer in charge of the area. Expectant mothers are thus provided with regular advice and treatment at centres which are not too distant from their homes. In consequence, abnormal cases can be detected at an early stage and sent in to the hospitals.

73. In addition, a great deal of Maternity and Infant Welfare work is undertaken by the various Missions hospitals. In all, there are eight approved Grade I Midwives' schools and twenty-six approved Grade II Midwives' schools.

74. Attendances during 1945 at both the Lagos and Ebute Metta Infant Welfare Clinics compared very favourably with the 1944 figures. 8,000 new cases of births reported were visited by the Health Visitors. A total of 61,726 home visits were paid by the Health Visitors during the year.

75. Figures recorded at the School Clinics continue to show big increases. 8,197 new cases were dealt with and a total attendance of 27,529 recorded, as compared with 5,408 and 18,584 respectively in 1944.

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1945

EUROPEANS AND AFRICANS

Diseases	In-patients	Deaths	Out-patients	Deaths
1. (a) Typhoid fever .. .. ..	58	7	2	1
(b) Paratyphoid fever .. .. ..	8	—	2	—
2. Typhus .. .. ..	55	5	—	—
3. Relapsing fever .. .. ..	3	—	—	—
4. Undulant fever .. .. ..	—	—	—	—
5. Smallpox .. .. ..	554	100	51	—
6. Measles .. .. ..	327	4	464	—
7. Scarlet fever .. .. ..	1	—	—	—
8. Whooping cough .. .. ..	95	4	674	—
9. Diphtheria .. .. ..	1	—	—	—
10. Influenza :—				
(a) with respiratory complications ..	54	—	258	—
(b) without respiratory complications ..	—	—	—	—
11. Cholera .. .. ..	—	—	—	—
12. Dysentery :—				
(a) Amoebic .. .. ..	1,215	78	3,619	—
(b) Bacillary .. .. ..	373	46	435	—
(c) Unclassified .. .. ..	1,117	94	9,705	—
13. Plague :—				13755
(a) Bubonic .. .. ..	—	—	—	—
(b) Pneumonic .. .. ..	—	—	—	—
(c) Septicaemic .. .. ..	—	—	—	—
14. Acute Poliomyelitis .. .. ..	19	—	4	—
15. Encephalitis lethargica .. .. ..	4	3	—	—
16. Cerebro-spinal fever .. .. ..	1,502	311	420	1
17. Rabies .. .. ..	1	1	—	—
18. Tetanus .. .. ..	274	126	70	—
19. Tuberculosis of the respiratory system ..	879	216	533	—
20. Other tuberculosis diseases .. ..	326	40	321	—
21. Leprosy .. .. ..	258	12	496	—
22. Venereal Diseases :—				
(a) Syphilis .. .. ..	6,077	74	12,674	—
(b) Gonorrhoea .. .. ..	5,452	19	18,265	—
(c) Other Venereal Diseases .. ..	843	3	3,051	—
23. Yellow Fever .. .. ..	—	—	—	—
24. Malaria :—				
(a) Benign .. .. ..	18	2	30	—
(b) Subtertian .. .. ..	4,367	63	21,992	—
(c) Quartan .. .. ..	12	—	72	—
(d) Unclassified .. .. ..	4,172	60	55,392	1
25. Blackwater fever .. .. ..	24	6	2	—
26. Kala-azar .. .. ..	14	—	9	—
27. Trypanosomiasis .. .. ..	821	47	1,447	—
28. Yaws .. .. ..	434	2	31,285	—
<i>Carried forward..</i>	29,358	1,323	161,273	3

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1945—*contd.*

## EUROPEANS AND AFRICANS

Diseases	In-patients	Deaths	Out-patients	Deaths
Brought forward.. . . . .	29,358	1,323	161,273	3
29. Other protozoal diseases .. . . .	11	—	4	—
30. Ankylostomiasis .. . . .	1,778	6	2,691	—
31. Schistosomiasis .. . . .	606	12	1,494	—
32. Other helminthic diseases .. . . .	1,931	7	50,884	—
33. Other infectious or parasitic diseases ..	1,622	75	7,749	—
34. Cancer and other tumours :—				
(a) Malignant .. . . .	160	42	53	—
(b) Non-malignant .. . . .	719	12	1,220	—
(c) Undetermined .. . . .	106	2	184	—
35. Rheumatic conditions .. . . .	1,181	9	60,601	—
36. Diabetes .. . . .	95	8	79	—
37. Scurvy .. . . .	7	—	36	—
38. Beriberi .. . . .	109	20	723	—
39. Pellagra .. . . .	37	6	847	—
40. Other diseases :—				
(a) Nutritional .. . . .	102	2	3,508	—
(b) Endocrine glands and general ..	137	12	703	1
41. Diseases of the blood and blood-forming organs.	2,198	129	20,039	—
42. Acute and chronic poisoning .. . . .	32	7	26	—
43. Cerebral haemorrhage .. . . .	314	74	292	—
44. Other diseases of the nervous system ..	1,242	156	7,788	—
45. Trachoma .. . . .	43	—	256	—
46. Other diseases of the eye and annexa ..	1,285	1	27,252	—
47. Diseases of the ear and mastoid sinus ..	264	7	20,266	—
48. Diseases of the circulatory system :—				
(a) Heart .. . . .	950	252	1,425	—
(b) Other circulatory diseases .. . . .	1,519	36	8,320	—
49. Bronchitis .. . . .	2,936	42	62,143	—
50. Pneumonia :—				
(a) Broncho-pneumonia .. . . .	1,537	325	705	—
(b) Lobar-pneumonia .. . . .	3,375	236	716	1
(c) Otherwise defined .. . . .	—	—	—	—
51. Other diseases of the respiratory system	943	52	11,727	—
52. Diarrhoea and enteritis :—				
(a) Under two years of age .. . . .	217	26	4,964	—
(b) Over two years of age .. . . .	2,076	163	28,808	—
53. Appendicitis .. . . .	148	8	140	—
54. Hernia, Intestinal obstruction .. . . .	4,898	115	18,164	1
55. Cirrhosis of the liver .. . . .	140	48	73	—
56. Other diseases of the liver and biliary passages.	1,187	96	2,429	—
Carried forward.. . . . .	63,263	3,309	507,582	7

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1945—*contd.*

## EUROPEANS AND AFRICANS

Diseases	In-patients	Deaths	Out-patients	Deaths
Brought forward.. . .	63,263	3,309	507,582	7
57. Other diseases of the digestive system	2,658	114	99,673	—
58. Nephritis :—				
(a) Acute .. .. ..	291	54	418	—
(b) Chronic .. .. ..	306	70	265	—
59. Other non-venereal diseases of the genito-urinary system.	5,947	106	22,508	—
60. Diseases of pregnancy, child-birth and the puerperal state :—				
(a) Abortion .. .. ..	1,064	13	790	—
(b) Ectopic gestation .. .. ..	24	5	69	—
(c) Toxaemias of pregnancy .. ..	649	50	599	3
(d) Other conditions of the puerperal state.	11,293	137	1,067	1
61. Diseases of the skin, cellular tissue, bones and organs of locomotion.	13,557	141	161,856	—
62. Congenital malformation and diseases of early infancy :—				
(a) Congenital debility .. .. ..	607	145	1,760	—
(b) Premature birth .. .. ..	171	56	3	—
(c) Injury at birth .. .. ..	23	7	13	—
63. Senility .. .. ..	38	12	28	—
64. External causes :—				
(a) Suicide .. .. ..	9	2	—	—
(b) Other forms of violence .. ..	7,742	231	73,685	—
65. Ill-defined .. .. ..	976	68	8,101	—
Total .. ..	108,618	4,520	878,417	11

## LABORATORY SERVICE

## EXPANSION

Plans for the country type Hospital Laboratory are now complete and have been approved. Alterations to the clinical laboratory at Jos and to the clinical laboratory at Kano City Hospital with a view to the creation there of an Area Pathologist's Laboratory have been under discussion.

## GENERAL WORK

2. A brief summary of the work performed during the year is appended.

*Headquarters, Medical Laboratory Service*

(Medical Research Institute, Yaba, and Pathology Department, African Hospital, Lagos.)

Clinical Pathology (including Bacteriology, Biochemistry and Histology) ...    ...    ...    ...    ...    ... 52,734 examinations

Autopsies    ...    ...    ...    ...    ...    ... 698

*Rabies*

3. 117 brains were received for examination, comprising

Dog	...	...	...	...	...	107
Human	...	...	...	...	...	4
Cat	...	...	...	...	...	4
Horse	...	...	...	...	...	1
Monkey	...	...	...	...	...	1

forty-three brains were positive including one human and one cat. Three of the positive brains were histologically negative, but were subsequently proved positive by the inoculation of white mice.

*Yellow Fever*

4. Ten specimens of liver were received from suspected cases of yellow fever. All were negative.

*Out-station Laboratories*

5. (Nine. Eight staffed by Technical Assistants and one by a Laboratory Superintendent and Technical Assistants).

Clinical Pathology    ...    ... more than 85,500 examinations.

Autopsies    ...    ...    ...    ...    ... 264

*VACCINES**Smallpox Vaccine*

6. The total yield of pulp was 20,173 grammes from 576 sheep: an average of 36.3 grammes per sheep compared with 30 grammes per sheep in 1944. The

mortality rate among the sheep was 18.1 per cent compared with 35.5 per cent in 1944. This reduction in mortality is largely due to the work of the Veterinary Department, who advised the use of sulphuric acid in the treatment of diarrhoea. Final potency tests in batches prior to issue were carried out by primary single insertion vaccination in infants. The average success rate was over 90 per cent. A total of 142,659 tubes were issued during the year, equivalent to 2,853,180 single doses. The vaccine continues to be stored in the Yellow Fever Research Institute as shipping difficulties have delayed the arrival of the refrigerator plant.

#### *Rabies Vaccine*

7. 60,380 ccs. of vaccine were prepared and issued.

#### *T.A.B. Vaccine*

8. 1,140 ccs. were prepared and issued.

#### *Yellow Fever Inoculations*

9. 1,840 inoculations were given with Rockefeller Vaccine.

#### *Media and Antigens*

10. 1,400 ccs. of Kahn and 2,481 ccs. of Ide antigen were prepared. 327,465 ccs. of various media were prepared.

#### *Training of Technical Assistants*

11. The shortage of staff and the lack of accommodation in the Pathology Department, Lagos, continues. There were twenty-one Third Class Technical Assistants on probation. Of these, ten were appointed during the year. It is hoped that when Area Pathologists are stationed in Kano and Port Harcourt some of the teaching of probationers will be carried out in these laboratories, as it is desirable that not more than ten probationers should undergo training in Lagos. Vacancies for Technical Assistants remain to be filled and it is intended so far as possible to fill these with ex-servicemen, trained or semi-trained in laboratory work.

#### *Teaching of Pathology*

12. The syllabus for the teaching of Pathology and allied subjects at the Medical School was revised, a new feature introduced consisting of tutorial discussions in the Senior Clinical Pathology Class on the interpretation and significance of the more important biochemical estimations, with demonstrations of the technique of some of the more simple reactions.

#### *Special Investigations*

13. During the outbreak of epidemic typhus at Jos, Dr B. G. T. Elmes isolated a strain of Rickettsia from lice and maintained it for six passages. Rickettsial agglutination reactions were kindly performed in Accra by Brigadier G. M. Findlay. During the year Dr Cannon brought out Rickettsial suspensions, which are now in use at the Medical Research Institute.

14. A Penicillin Research Committee was formed in Lagos in the early part of the year and considerable experimental treatment was carried out in cases of tropical pyomyositis, tropical ulcers and yaws, with bacteriological control throughout.

## SUMMARY OF WORK CARRIED OUT FOR THE ARMED FORCES DURING 1945

### A. HEADQUARTERS, MEDICAL LABORATORY SERVICE (Medical Research Institute, Yaba and Pathology Department, African Hospital, Lagos).

Blood Films for malarial parasites	...	...	...	...	580
Urine Examinations	...	...	...	...	5
Stool Examinations	...	...	...	...	401
Stool Cultures	...	...	...	...	35
Urethral Smears	...	...	...	...	953
Kahn Tests	...	...	...	...	185
Histopathology	...	...	...	...	51
Miscellaneous	...	...	...	...	11

### VACCINES:

Smallpox	...	...	...	...	...	6,400 tubes
Yellow Fever Inoculations	...	...	...	...	...	81
Kahn Antigen	...	...	...	...	...	575 ccs.
Media (various)	...	...	...	...	...	100,900 ccs.
Field's stain	...	...	...	...	...	3,000 ccs.

### B. — OUT-STATION LABORATORIES

Clinical Pathology — Total Examinations	...	...	...	1,408.
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## *Appendix B*

### THE MEDICAL AND PHARMACY SCHOOLS

*Staff.*—One new Technical Assistant was appointed during 1945 to the Department of Physiology. Otherwise the permanent staff of the school consisted of the Assistant Principal, the Superintendent of the School of Pharmacy and a Laboratory Superintendent. Members of the Medical Staff of His Majesty's Forces, resident in Lagos, have again rendered most valuable service both in the teaching and in the examinations throughout the year.

2. *Equipment.*—Supplies have unavoidably been small and irregular. As a result, in spite of the exercise of rigid economy, the practical work has inevitably suffered.

3. *Students.*—A total of twenty-eight students attended classes during the year. One qualified for the Diploma, thereby bringing the total number now in practice to forty.

4. *Examinations.*—These were held in December 1944, March, July and September, 1945. There were fifty-one admissions to examination, of which ten were re-admissions. Of these, there were thirty-five passes and sixteen failures.

### *School of Pharmacy*

5. *Staff.*—The staff consisted of the Superintendent and four African teachers.

## 6. Students.—

Part I ...	... ...	... ...	... ...	... ...	... 12	students
Part II ...	... ...	... ...	... ...	... ...	... 14	„
Chemist and Druggist Class (old regulation) ...					6	„

7. Examinations.—These were held in July 1945. There were nineteen admissions. Of these, there were nine passes and ten failures.

## *Hydnocarpus Oil Preparation*

8. 2,775 bottles of sterile oil with 4 per cent creosote were prepared for the Medical Stores. Investigations into the unsuitability of samples of oil show that the irritant substance found is in the nature of a peroxide, and to counter this steam is now passed through the oil before processing, thereby allowing the peroxide to volatilise.

9. Preparations of sterile injections of glucose, glucose-saline and morphine were made at intervals during the year for use in the African Hospital, while Dusting Powder and supplies of brilliant green solution were made for the Lagos Town Council.

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## Appendix C

### SLEEPING SICKNESS SERVICE

A survey was done in the Obudu Division of Ogoja for the first time. 618 cases were found among 49,610 people seen—an infection rate of 1.24 per cent. Treatment was with the synergic antrypol tryparsamide mixture.

2. Surveys were also made in Calabar and Kabba in connection with development schemes. In the dense and extensive forest area between Calabar and Mamfe tsetse fly was present, but no case of human trypanosomiasis found. In Kabba Province, of 1,710 people examined, six cases of trypanosomiasis were diagnosed.

3. Resurveys were made in parts of the Northern Provinces by European Officers in charge of small teams. These showed that where the original infection rate had been between 7 per cent and 35 per cent, the present incidence varied between 0.3 per cent and 1.3 per cent in the 85,000 people examined.

4. Facilities for the treatment of sleeping sickness are available at sixty-two Sleeping Sickness Survey Dispensaries, dressing stations, or field-posts, thirty-two Native Administration Dispensaries, four Mission stations and at all Government Hospitals. At these centres, 15,324 cases were treated. The dispensaries function, in addition, as general dispensaries, and also undertake routine sanitary and anti-epidemic work in many districts.

5. Therapeutic trials are still being made with an American trivalent arsenical and with Pentamidine. Both are highly trypanocidal and rapidly effective in the early case, and have the advantage over antrypol in that no toxic effects result from the initial injection of even a full dose: further, optimal dosage can be given within a few days. Pentamidine can safely be given intramuscularly, but can be highly dangerous if given intravenously. For mass treatment of large numbers of

cases in various stages of the disease the combination of antrypol and tryparsamide is still advised.

6. In Zaria and Kano Provinces communal clearings were continued to protect village areas. Old clearings in these and other Provinces were inspected and it was observed that reslashing was efficiently done.

7. In the tsetse-free corridor in the Anchau District, more schools were built and the school-farms gave good yields in their first year. Propaganda teams continue to tour villages in the corridor advising village heads in matters relating to public health.

8. The Anchau cattle farm is now in charge of an Agricultural Assistant. The health of the cattle has been good and they are tended with care. Weekly dipping has greatly reduced the incidence of disease.

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#### Appendix D

#### MINESFIELD MEDICAL FACILITIES

The following are the attendance figures for 1944 and 1945 :—

				1944	1945
New out-patients	...	...	...	12,002	9,373
New in-patients	...	...	...	1,119	2,235
Total Attendances	...	...	...	23,131	26,350

2. The decrease in new out-patients attending is coincident with the disappearance of "selected labour", but there has been a substantial increase in the pagan attendances, especially of women and children, throughout the year. Of the total attendances, 7,786 came from the Mines, 18,564 from the local population, as compared in 1944 with 8,381 and 14,756 respectively.





